

EPA Conducts Additional Air Monitoring In Bristol Area



October 2021

Key Information

- As a result of odor complaints, received Summer 2021, EPA conducted real-time air monitoring in both Bristol, VA and Bristol, TN to determine if the air contains hazardous substances, and if those substances are found at levels that could cause a concern for human health and the environment. This effort was part of a Removal Site Evaluation conducted by EPA Region 3.
- EPA Region 3 continues coordinating closely with EPA Region 4, the Virginia Department of Environmental Quality (VADEQ), Tennessee Department of Environment and Conservation (TDEC), Agency for Toxic Substances (ATSDR), both Cities of Bristol, and Community Leaders.
- EPA finalized and published the data summary report on October 8, 2021. For this report and previous fact sheets, see <https://response.epa.gov/11184BristolAir>.

Current EPA Activities

Continued conversations with the Agencies and Community Leaders indicate that the odors may have increased in intensity and/or duration. As a result, EPA agreed to conduct additional monitoring in the area.

Location of Air Monitors

Locations for the air monitors were selected based on a number of factors, but mostly on the advice of community leaders. After identifying geographic areas for the monitors, specific locations with favorable conditions for collecting quality data were identified. These include locations with access to power and locations easily accessible, yet secure enough to avoid tampering, theft or vandalism. Additionally, EPA conducted periodic mobile air monitoring using hand held instruments.

What Compounds Did EPA Monitor With The Instruments?

Fixed locations monitored for the following:

- Hydrogen Sulfide
- Ammonia
- Sulfur Dioxide
- Volatile Organic Compounds (VOCs)
- Methyl Mercaptan

Mobile monitoring monitored for the following:

- Volatile Organic Compounds (VOCs)
- Oxygen
- Carbon Monoxide
- Benzene
- Methane

Weather data such as wind speed, direction, humidity, and temperature were also tracked via weather station. Monitoring weather conditions may be helpful in understanding if certain conditions contribute to odors.

The air monitors ran from October 19 - October 28, 2021. The monitors were remotely monitored and recorded data 24 hours a day. EPA personnel maintained notes of any trends or anomalies that may have occurred.

To ensure proper function, the monitoring equipment was checked and re-calibrated as needed. During these times, EPA also conducted mobile air monitoring in the evening and/or early morning hours in and around neighborhoods where odor complaints were common.

As the agencies gather information, additional compounds may be added to the monitoring program.

Air Sampling

VADEQ will collect additional air samples at the designated monitoring locations, as needed. Samples will typically be collected in the evening when high odors are usually reported. These air samples will run for a minimum time of 8-hours to produce a sufficient data set to be used for public health evaluation purposes.

Can Environmental Odors Make Me Sick?

Everyone reacts to odors differently. Some people are more sensitive to environmental odors than others. When you are more sensitive to an odor, you may smell the odor in the air, even at very low concentrations. In general, as concentration levels increase, more people will be able to smell the odor. The air monitoring equipment being used by EPA can detect compounds at very low levels, which help us understand the air quality concerns in this community better.

Next Steps

- EPA and the coordinating agencies will continually evaluate the readings and results during the monitoring period.
- EPA will provide the data collected to ATSDR to assist in evaluating if the odors contain hazardous substances and if they pose a risk to human health.
- Once the data has been reviewed and evaluated, it will be made available to the public.
- EPA will coordinate and provide the data to other salient EPA programs for review.

Key Contacts

Myles Bartos

EPA On-Scene Coordinator

215-814-3342

bartos.myles@epa.gov

Lora Werner

Agency for Toxic Substances
and Disease Registry (ATSDR)

215-814-3141

lkw9@cdc.gov

(For Health Related Questions)